UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,262	06/29/2001	Alex Gammerman	211163	2977

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EXAMINER
BELL, MELTIN

ART UNIT	PAPER NUMBER
2121	

DATE MAILED: 05/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>22 March 2004</u>.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-18</u> is/are pending in the application.

   4a) Of the above claim(s) <u>1-9,11,13 and 16</u> is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>10,12,14,15,17 and 18</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☒ Some * c)☐ None of:

    1. ☒ Certified copies of the priority documents have been received.

    2. ☐ Certified copies of the priority documents have been received in Application No. _____.

    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date <u>9/3-22-04</u>.

4) ☒ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. <u>11</u>.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to application **09/831,262** filed 6/29/01 as well as Preliminary Amendment A filed 5/1/01, Amendment B filed 3/22/04 and the IDS filed 3/22/04. Currently amended and previously presented claims 10, 12, 14-15 and 17-18 filed by the applicant have been entered and examined. Claims 1-9, 11, 13 and 16 have been canceled as requested by the applicant. As presented later in this Office Action, the currently amended and previously presented claims 10, 12, 14-15 and 17-18 are not persuasive for being anticipated by prior art. The following comments in this action and the accompanying Interview Summary form present the application's current status since the last action was mailed 11/13/03.

Priority

Applicant's claim for foreign priority based on application PCT/GB99/03737 filed under 35 USC 371 on November 9, 1999 and 9824552.5 filed in the United Kingdom on **November 9, 1998** is acknowledged. Though the copy of the PCT application was received in accordance with the 3/15/04 telephone discussion between examiner Meltin Bell and attorney Dennis Schlemmer, the statements in the previous Office Action concerning foreign priority do not relate to whether a claim for foreign priority can be made and are hence withdrawn.

Information Disclosure Statement

The replacement IDS filed 3/22/04 providing correct information for the two non-patent literature documents in the 6/15/01 IDS is noted.

Oath/Declaration

The application data sheet showing the city and country of residence of the inventors is noted.

Drawings

Applicant(s) argue(s) that "the items referred to are those enumerated at lines 20 and 28 on page 6. No correction is therefore believed to be required" (Amendment B REMARKS page 9, paragraph 4). The objection to the drawing is withdrawn.

Specification

The Abstract filed with Amendment B 3/22/04 is noted.

Claim Objections

Claims 10, 12 and 14 are objected to because of the following informalities:

Regarding claim 10:

- 'Data classification' would read well as 'A data classification'

Regarding claim 12:

- 'Data classification' would read well as 'A data classification'

Regarding claim 14:

- 'Data classification' would read well as 'A data classification'

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Currently amended claims 10, 14-15 and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The use of 'overall' in the currently amended claims for describing strangeness value(s) adds new matter not explained in the specification as filed.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15 and 17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claims (e.g.

"examples", "classification", "strangeness value", "confidence value") raise a question as

to whether the claims are directed merely to an abstract idea that is not tied to a

technological art, environment or machine which would result in a practical application

producing a concrete, useful, and tangible result to form the basis of statutory subject

matter under 35 U.S.C. 101. For example, if claim 15 was amended to recite a

computer-implemented data classification method, it will be statutory in most cases

since use of technology permits the function of the descriptive material to be realized.

Claim Rejections - 35 USC § 103

To expedite this application, a complete examination appears below, despite the

presence of the rejection under 35 U.S.C. 101.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the Office presumes that the subject matter of the

various claims was commonly owned at the time any inventions covered therein were

made absent any evidence to the contrary. Applicant is advised of the obligation under

37 CFR 1.56 to point out the inventor and invention dates of each claim that was not

commonly owned at the time a later invention was made in order for the Office to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

Currently amended and previously presented claims 10, 12, 14-15 and 17-18

stand rejected under 35 U.S.C. 103(a) as being obvious over *Mizuno et al* USPN

5,577,166 (November 19, 1996) in view of *Tsuboka* USPN 5,608,841 (March 4, 1997).

Regarding claim 10 (Currently Amended):

Mizuno et al teaches,

- an input device for receiving a plurality of training classified examples and at least one

unclassified example (FIG. 2, item 23)

- a memory for storing said classified and unclassified examples (column 2, lines 54-59,

"classification includes steps ... of the comparison")

- an output terminal for outputting a predicted classification for said at least one

unclassified example (Fig. 2, item 24)

- a processor for identifying the predicted classification of said at least one unclassified

example (Fig. 2, item 21)

- wherein the processor includes:

- classification allocation means for allocating potential classifications to each said

unclassified example and for generating a plurality of classification sets, each said

classification set containing said plurality of training classified examples with their

classification and said at least one unclassified example with its said allocated potential

classification (column 5, lines 42-51, "As shown in FIG. 3 ... program module")

- assay means including an example valuation device which determines individual

strangeness values for each said training classified example and said at least one

unclassified example having an allocated potential classification, the assay means

determining an overall strangeness value valid under the iid assumption for each said

classification set in dependence on said individual strangeness values (Figs. 4-8; Fig. 9,

items 94-96; column 7, lines 1-12, "FIG. 5 shows an ... the training data")

- a strength of prediction monitoring device for determining a confidence value for said

predicted classification on the basis of said overall strangeness value assigned by said

assay means to one of said classification sets (Fig. 6; Fig. 9, items 94-96; column 10,

lines 32-36, "The execution history ... control processing module 15"; column 13, lines

13-23, "an input pattern ... increase the reliability")

However, *Mizuno et al* doesn't explicitly teach a strength of prediction monitoring device

for determining a confidence value for said predicted classification on the basis of said

overall strangeness value assigned by said assay means to one of said classification

sets to which the second most likely allocated potential classification of said at least one

unclassified example belongs or a comparative device for selecting the classification set

to which the most likely allocated potential classification for said at least one

unclassified example belongs, wherein said predicted classification output by the output

terminal is said most likely allocated classification according to said overall strangeness

values assigned by said assay means while *Tsuboka* teaches,

- a second most likely allocated potential classification of said at least one unclassified

example belongs (column 11, lines 11-20, "In ordinary vector ... the object function")

- a comparative device for selecting the classification set to which the most likely allocated potential classification for said at least one unclassified example belongs, wherein said predicted classification output by the output terminal is said most likely allocated classification according to said overall strangeness values assigned by said assay means (Abstract, "A method and ... y is compared"; column 11, lines 11-20, "In ordinary vector ... the object function")

Motivation – The portions of the claimed apparatus would have been a highly desirable feature in this art for

- Maintaining accuracy (*Tsuboka*, column 4, lines 34-44, "Such phenomenon is ... discrete HMM computations")

- Detecting abnormalities in the classification process (*Mizuno et al*, Abstract, "A method of ... an abnormality thereof")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine *Mizuno et al* with *Tsuboka* to obtain the data processing apparatus invention specified in claim 10. The modification would have been obvious because one of ordinary skill in the art would have been motivated to improve classification accuracy.

Regarding claim 12 (Currently Amended):

The rejection of claim 10 is incorporated. Claim 12's further limitations are taught in *Tsuboka*:

- Lagrange multipliers are used to determine said individual strangeness values (column 9, lines 10-37, "Here, defining ... using Lagrange multipliers")

Therefore, claim 12 is rejected under the same rationale as claim 10.

Regarding claim 14 (Currently Amended):

Mizuno et al teaches,

- an input device for receiving a plurality of training classified examples and at least one

unclassified example (FIG. 2, item 23)

- a memory for storing said classified and unclassified examples (column 2, lines 54-59,

"classification includes steps ... of the comparison")

- stored programs including an example classification program (column 5, lines 42-51,

"As shown in FIG.3 ... the program module")

- an output terminal for outputting a predicted classification for said at least one

unclassified example (Fig. 2, item 24)

- a processor controlled by said stored programs for identifying the predicted

classification of said at least one unclassified example, wherein said processor includes

(Fig. 2, item 21)

- classification allocation means for allocating potential classifications to each said

unclassified example and for generating a plurality of classification sets, each said

classification set containing said plurality of training classified examples with their

classification and said at least one unclassified example with its allocated potential

classification (column 5, lines 42-51, "As shown in FIG. 3 ... program module")

- assay means including an example valuation device which determines individual

strangeness values for each said training classified example and said at least one

unclassified example having an allocated potential classification, the assay means

determining an overall strangeness value valid under the iid assumption for each said

classification set in dependence on said individual strangeness values (Figs. 4-8; Fig. 9,

items 94-96; column 7, lines 1-12, "FIG. 5 shows an ... the training data")

- a strength of prediction monitoring device for determining a confidence value for said

predicted classification on the basis of said overall strangeness value assigned by said

assay means to one of said classification sets (Fig. 6; Fig. 9, items 94-96; column 10,

lines 32-36, "The execution history ... control processing module 15"; column 13, lines

13-23, "an input pattern ... increase the reliability")

However, *Mizuno et al* doesn't explicitly teach a strength of prediction monitoring device

for determining a confidence value for said predicted classification on the basis of said

overall strangeness value assigned by said assay means to one of said classification

sets to which the second most likely allocated potential classification of said at least one

unclassified example belongs or a comparative device for selecting the classification

set to which the most likely allocated potential classification for said at least one

unclassified example belongs, wherein the predicted classification output by said output

terminal is the most likely allocated potential classification according to said overall

strangeness values assigned by said assay means while *Tsuboka* teaches,

- second most likely allocated potential classification of said at least one unclassified

example belongs (column 11, lines 11-20, "In ordinary vector ... the object function")

- a comparative device for selecting the classification set to which the most likely

allocated potential classification for said at least one unclassified example belongs,

wherein the predicted classification output by said output terminal is the most likely

allocated potential classification according to said overall strangeness values assigned

by said assay means (Abstract, "A method and ... y is compared"; column 11, lines 11-

20, "In ordinary vector ... the object function")

Motivation – The portions of the claimed apparatus would have been a highly desirable

feature in this art for

- Maintaining accuracy (*Tsuboka*, column 4, lines 34-44, "Such phenomenon is ...

  discrete HMM computations")

- Detecting abnormalities in the classification process (*Mizuno et al*, Abstract, "A

  method of ... an abnormality thereof")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to combine *Mizuno et al* with *Tsuboka* to obtain the data

processing apparatus invention specified in claim 14. The modification would have

been obvious because one of ordinary skill in the art would have been motivated to

improve classification accuracy.

Regarding claim 15 (Currently Amended):

Mizuno et al teaches,

- inputting a plurality of training classified examples and at least one unclassified

example (FIG. 2, item 23)

- identifying a predicted classification of said at least one unclassified example which

includes (column 2, lines 54-59, "classification includes steps ... of the comparison")

- allocating potential classifications to each said unclassified example (column 5, lines

42-51, "As shown in FIG. 3 ... program module")

- generating a plurality of classification sets, each said classification set containing said plurality of training classified examples with their classification and said at least one unclassified example with its allocated potential classification (column 5, lines 42-51, "As shown in FIG. 3 ... program module")

- determining an individual strangeness value for each said training classified example and said at least one unclassified example having an allocated potential classification, and an overall strangeness value valid under the iid assumption for each said classification set in dependence on the individual strangeness values (Figs. 4-8; Fig. 9, items 94-96; column 7, lines 1-12, "FIG. 5 shows an ...the training data")

- selecting the said classification set to which the most likely allocated potential classification for said at least one unclassified example belongs, wherein said predicted classification is the most likely allocated potential classification in dependence on said overall strangeness values (Fig. 9, items 94-96; column 2, lines 54-59, "classification includes steps ... of the comparison"; column 9, lines 14-26, "an input pattern ... to the user")

- determining a confidence value for said predicted classification on the basis of the overall strangeness value assigned to one of said classification sets (Fig. 6; Fig. 9, items 94-96; column 10, lines 32-36, "The execution history ... control processing module 15"; column 13, lines 13-23, "an input pattern ... increase the reliability")

- outputting said predicted classification for said at least one unclassified example and said confidence value for said predicted classification (Figs. 7, 9; column 4, lines 16-27, "the input pattern ... supplied input pattern")

However, *Mizuno et al* doesn't explicitly teach determining a confidence value for said predicted classification on the basis of the overall strangeness value assigned to one of said classification sets to which the second most likely allocated potential classification for said at least one unclassified example belongs while *Tsuboka* teaches,

- a second most likely allocated potential classification for said at least one unclassified example belongs (column 11, lines 11-20, "In ordinary vector ... the object function")

<u>Motivation</u> – The portions of the claimed method would have been a highly desirable feature in this art for

- Maintaining accuracy (*Tsuboka*, column 4, lines 34-44, "Such phenomenon is ... discrete HMM computations")

- Detecting abnormalities in the classification process (*Mizuno et al*, Abstract, "A method of ... an abnormality thereof")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine *Mizuno et al* with *Tsuboka* to obtain the data classification method invention specified in claim 15. The modification would have been obvious because one of ordinary skill in the art would have been motivated to improve classification accuracy.

Regarding claim 17 (Previously Presented):

The rejection of claim 15 is incorporated. Claim 17's further limitations are taught in *Mizuno et al* :

- said selected classification set is selected without the application of any general rules

determined from the said training set (column 2, lines 54-59, "classification includes

steps ... of the comparison"; column 9, lines 14-26, "an input pattern ... to the user")

Therefore, claim 17 is rejected under the same rationale as claim 15.

Regarding claim 18 (Currently Amended):

Mizuno et al teaches,

- generating a plurality of classification sets, each said classification set containing a

plurality of training classified examples with their classification and at least one

unclassified example that has been allocated a potential classification (column 2, lines

54-59, "classification includes steps ... of the comparison"; column 5, lines 42-51, "As

shown in FIG. 3 ... program module")

- determining a an individual strangeness value for each said training classified example

and said at least one unclassified example having an allocated potential classification,

and an overall strangeness value valid under the iid assumption for each said

classification set in dependence on said individual strangeness values (Figs. 4-8; Fig. 9,

items 94-96; column 7, lines 1-12, "FIG. 5 shows an ...the training data")

- selecting the classification set to which the most likely allocated potential classification

for the said at least one unclassified example belongs, wherein the predicted

classification is the most likely allocated potential classification in dependence on said

overall strangeness values (Fig. 9, items 94-96; column 2, lines 54-59, "classification

includes steps ... of the comparison"; column 9, lines 14-26, "an input pattern ... to the

user")

- determining a confidence value for said predicted classification on the basis of said

overall strangeness value assigned to one of said classification sets (Fig. 6; Fig. 9,

items 94-96; column 10, lines 32-36, "The execution history ... control processing

module 15"; column 13, lines 13-23, "an input pattern ... increase the reliability")

However, *Mizuno et al* doesn't explicitly teach determining a confidence value for said

predicted classification on the basis of said overall strangeness value assigned to one

of said classification sets to which the second most likely allocated potential

classification for said at least one unclassified example belongs while *Tsuboka* teaches,

- a second most likely allocated potential classification for said at least one unclassified

example belongs (column 11, lines 11-20, "In ordinary vector ... the object function")

Motivation – The portions of the claimed data carrier would have been a highly desirable

feature in this art for

- Maintaining accuracy (*Tsuboka*, column 4, lines 34-44, "Such phenomenon is ...
  discrete HMM computations")

- Detecting abnormalities in the classification process (*Mizuno et al*, Abstract, "A
  method of ... an abnormality thereof")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to combine *Mizuno et al* with *Tsuboka* to obtain the data invention

specified in claim 18, a data carrier on which is stored a classification program for

classifying data. The modification would have been obvious because one of ordinary

skill in the art would have been motivated to improve classification accuracy.

RESPONSE TO APPLICANTS' AMENDMENT B OBJECTIONS TO THE CLAIMS

REMARKS

Applicant(s) argue(s) that "Claims 10, 14, 15, and 18 have been amended to overcome the examiner's objections" (Amendment B, page 9, paragraph 7). Claims 10, 14, 15 and 18 now include the features of claims 11 and 13, in order to ensure that they are fully distinguished from the prior art (Amendment B, page 9, paragraph 8). Applicant also states that the aim of the invention is not only to predict a classification for an unknown item, but also to provide a measure of confidence in that classification, valid under the iid assumption (that is, the assumption that the training and unknown examples are generated from the same distribution) (Amendment B, page 9, paragraph 10 and page 10, paragraph 1).

Applicant(s) argue(s) that the references do not disclose an overall strangeness value valid under the iid assumption for each classification set in dependence on the individual strangeness values, a comparative device for selecting the classification set to which the most likely potential classification for the unclassified example belongs on the basis of the overall strangeness values assigned by the assay means, and a strength of prediction monitoring device for determining a confidence value for the predicted classification on the basis of the overall strangeness value assigned to the classification set to which the second most likely potential classification of the unclassified example belongs (Amendment B, page 10, paragraph 2).

Applicants' arguments are not agreed with. Mizuno and Tsuboka disclose the

subject matter set forth in the claims by the applicants. Mizuno discloses

- strangeness values

- a confidence value

- a comparative device for selecting the most likely classification

while Tsuboka discloses

- a comparative device for selecting the most likely and second most likely

  allocated potential classification sets to which at least one unclassified example

  belongs.

The items listed above correspond to the applicants' claimed limitations, albeit, with

different names. As set forth above, with regards to Fig. 9, the individual error patterns

are determined and an accumulated error or "overall" error is calculated. Whether this

is called a strangeness value or an error is of no moment since applicants have not set

forth any distinction between the two.

Mizuno discloses a comparative device for selecting the most likely classification.

This device is in Fig. 2, item 21. Applicants do not dispute that item 21 performs this

function.

Applicants argue that Mizuno does not disclose a most likely potential

classification and a second most likely potential classification. The examiner agrees.

However, Tusboka is cited and discloses a fuzzy clustering vector in column 11, lines

12-14 that may belong to several clusters at different degrees thus establishing a

strength of classification. Thus giving the likelihoods of classification for the data. The

reliability of the classification is disclosed in Mizuno at column 13, lines 13-23. The

reliability gives a confidence for the classification. No distinction can be seen for these

two terms.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy

as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure:

- *Mizuno*; USPN 5,577,166; Method and apparatus for classifying patterns by use of

neural network

- *Tsuboka*; USPN 5,608,841; Method and apparatus for pattern recognition employing

the hidden Markov model

- *Borrey et al*; GB 2080072 A; Method and Apparatus for the Classification of Data

- *Sampson et al*; EP 450825 A2; Method and apparatus for the classification of data

- *Shinagawa*; US 5315313 A; Device for electing a figure from among figures depicted on a display device

- *Keeler et al*; US 5479573 A; Predictive network with learned preprocessing parameters

- *Cortes et al*; US 5640492 A; Soft margin classifier

- *Wu*; US 5845049 A; Neural network system with N-gram term weighting method for molecular sequence classification and motif identification

- *VOVK et al*; GB 2369899 A; Data labelling device and method thereof

- *Carpenter et al*; ART-EMAP: A neural network architecture for object recognition by evidence accumulation; IEEE Transactions on Neural Networks; Vol. 6, Is. 4; July 1995; pp 805-818

- *Wu et al*; Classification artificial neural systems for genome research; Proceedings Supercomputing; 16-20 Nov. 1992; pp 797-803

Any inquiry concerning this communication or earlier communications from the Office should be directed to Meltin Bell whose telephone number is 703-305-0362. This Examiner can normally be reached on Mon - Fri 7:30 am - 4:30 pm.

If attempts to reach this Examiner by telephone are unsuccessful, his supervisor, Anthony Knight, can be reached on 703-308-3179. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-305-

3900.

MB
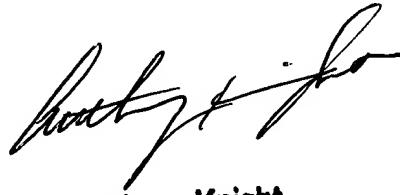
Anthony Knight
Supervisory Patent Examiner
Group 3600

| **Interview Summary** | **Application No.** 09/831,262 | **Applicant(s)** GAMMERMAN ET AL. |
| | **Examiner** Meltin Bell | **Art Unit** 2121 |

All participants (applicant, applicant's representative, PTO personnel):

(1) _Meltin Bell_.   (3)_____.

(2) _Dennis Schlemmer_.   (4)_____.

  Date of Interview: _15 March 2004_.

  Type: a)☒ Telephonic   b)☐ Video Conference
           c)☐ Personal [copy given to: 1)☐ applicant   2)☐ applicant's representative]

Exhibit shown or demonstration conducted: d)☐ Yes   e)☒ No.
    If Yes, brief description: _____.

Claim(s) discussed: _____.

Identification of prior art discussed: _____.

Agreement with respect to the claims f)☐ was reached. g)☒ was not reached. h)☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: _See Continuation Sheet_.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

_____
Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)
In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
– Application Number (Series Code and Serial Number)
– Name of applicant
– Name of examiner
– Date of interview
– Type of interview (telephonic, video-conference, or personal)
– Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
– An indication whether or not an exhibit was shown or a demonstration conducted
– An identification of the specific prior art discussed
– An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
– The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Dennis Schlemmer wanted to know if the two points I raise in my 09831262 FOA after the bolded priority date were of great enough concern that the application wouldn't get the priority. I told him I wanted to make a note of my observations in case the Office chose to deny the application or priority. In regards to the first point, he wondered if including a copy of the PCT application would help and I said it couldn't hurt. In regards to the second point, I also clarified that 'this application' meant 09831262. We concluded with me advising him of new policies requiring me to complete an interview summary form and submit it with the next action..